Application No.: 10/721615

Docket No.: NGW-014

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A fuel cell system comprising:

a fuel cell for generating electricity using a hydrogen gas and an oxidant gas as a reaction gas;

a hydrogen discharge unit for discharging hydrogen from the fuel cell under a predetermined condition;

a hydrogen concentration reduction process unit for reducing the concentration of hydrogen discharged from the hydrogen discharge unit; and

a hydrogen concentration detection unit for detecting an instantaneous hydrogen concentration of a gas processed by the hydrogen concentration reduction process unit, in which a hydrogen discharge from the fuel cell by the hydrogen discharge unit is prohibited in the event that an instantaneous hydrogen concentration detected by the hydrogen concentration detection unit exceeds a first threshold; and

wherein the fuel cell system further comprises

an average hydrogen concentration calculating unit for calculating an average hydrogen concentration per hour of a gas processed by the hydrogen concentration reduction process unit, wherein

a hydrogen discharge from the fuel cell by the hydrogen discharge unit is prohibited in the event that an the instantaneous hydrogen concentration does not exceed the first threshold; detected by the hydrogen concentration detection unit exceeds a first threshold, or in the event that but the an average hydrogen concentration calculated by the average hydrogen concentration calculating unit exceeds a second threshold which is lower than the first threshold.

2. (Original) A fuel cell system as claimed in claim 1, further comprising a cell voltage sensor for detecting a cell voltage of the fuel cell so that the hydrogen discharge from the fuel cell by the hydrogen discharge unit can be selected based on the cell voltage.

3. (Original) A fuel cell system as claimed in claim 1, wherein the hydrogen discharge from the fuel cell by the hydrogen discharge unit can be performed intermittently.

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